ABSTRACT OF THE DISCLOSURE

In packet switching telecommunications networks, flow control is used to obtain optimal network working point, regulating the transmitter packet sending rate. The state of overload (congestion) or underutilization of the network can be detected explicitly using signalling from network nodes, or implicitly using number of packet (window W) and round trip time (T) measurements.

The Window-Time-Space Flow Control, WTFC is a method of determining the belonging part of network capacity, optimal packet sending rate and optimal window, based on the measured W,T point in the window-time space and knowledge about total network capacity W_0,T_0. In this way, devices with WTFC, nodes and terminals, keep optimal network working point near the on average empty queues mode of operation.

With networks utilizing WTFC, nodes can signal network parameters at connection establishment only. After that, all WTFC processing is done by terminal packet transmitter. WTFC transmitter determines both optimal window and optimal sending rate, thus improving regulation stability, limiting the number of packets in the network, and decreasing the variance of transmission rate.

SEQUENCE LISTING

Not applicable